

U S WEST, Inc.
Suite 700
1020 Nineteenth Street, NW
Washington, DC 20036
202 429-3136
FAX 202 296-5157

99-14
USWEST

Kenneth T. Cartmell
Executive Director - Federal Regulatory

March 1, 1999

Mr. Dale Hatfield
Chief, Office of Engineering and Technology
Federal Communications Commission
2000 M Street, NW, Room 480
Washington, DC 20554

RE: CC Docket No. 91-273
Final Service Disruption Report, Bellingham, WA
BLHMWA01DS0

Dear Mr. Hatfield:

On January 30, 1999, U S WEST Communications ("USWC") experienced a service outage in Bellingham, WA. In accordance with the reporting rules, enclosed is USWC's Final Disruption Report for this outage.

Please contact me if you have questions concerning this report.

Sincerely,



Attachment

cc: Mr. Richard Smith
Mr. Robert Kimball

Final Service Disruption Report

Reporting Company: U S WEST ("USW")

Location of Disruption: Bellingham, WA (BLHMWA01DS0)

1. Date and Time of Incident:

January 30, 1999 at 0224 PST.

2. Geographic Area Affected:

Bellingham, Washington

3. Estimated Number of Customers Affected:

58,007 network access lines were affected by the outage.

4A. Types of Services Affected:

Interoffice InterLATA services were affected.

4B. 911 Service Affected:

911 Service was not affected.

5. Duration of Outage:

Service was restored at 0313 PST. Total duration of the outage was 49 minutes.

6. Estimated Number of Blocked Calls:

Blocked calls were not collected at the time of the incident.

7A. Root Cause of the Incident:

The root cause of the incident was a dual "A" link failure in the central office, during a switch retrofit.

- On January 30, 1999 at 0224 PST, the Bellingham SS7 links failed during a 5E11 to 5E12 retrofit procedure. The retrofit procedure was at the stage of executing the "switch forward" action when multiple alarms were received. Both U S WEST and Lucent technicians were involved with the procedure and on hand when the switch began experiencing difficulties. They immediately implemented restoration activities. The switch stabilized and restored at 0303 PST.

7B. Name and Type of Equipment:

Lucent Technologies 5ESS Central Office Switch

7C. Specific Part of Network Affected:

Interoffice facility

8. Method(s) Used to Restore Service:

During the implementation of restoration activities, the switch stabilized and recovered.

9. Steps Taken to Prevent Recurrence of Outage:

The following steps have been or will be taken to prevent recurrence of the outage:

- ◆ A printout of the events was captured and has been sent to the Electrical Systems Assistance Center (ESAC) for technical analysis.
- ◆ Discussions with Lucent indicate that there may be difficulty if only one Common Network Interface (CNI) is in operation during the procedure.

10A. Applicable Best Practice(s):

U S WEST reviewed *Network Reliability: A Report to the Nation*, June 1993 and evaluated all recommendations and best practices by focus area. Based on the root cause analysis, the most appropriate focus areas are:

Section B - Signaling Network Systems
Reference 6.1.1 - Root Cause Analysis

10B. Best Practice(s) Used:

Section B - Signaling Network Systems
Reference 6.1.1 - Root Cause Analysis

10C. Analysis of Effectiveness of Best Practice(s):

Section B -- Signaling Network Systems

Reference 6.1.1 -- Root Cause Analysis

This recommendation is specific to Signaling Networks, but USWC requires a root cause analysis on any significant network failure.

Contact Person:

Ken Cartmell, Executive Director - Federal Regulatory
U S WEST
1020 19th Street, NW, Suite 700
Washington, D.C. 20036
Telephone (202) 429-3136